REQUEST FOR PROPOSAL

Date of Request: 22/10/2026

Project Code: 13/11/2026

Request: Provision of an Imaging System for Nucleic acid/protein gels and Western blots for the Centre for Bioprocess Engineering Research, Department of Chemical Engineering, University of Cape Town (UCT) under the DSTI/KfW/SAMRC Support of development and production of vaccines in South Africa Project

RFQ Number: 225713 00100

Please note we would like a proposal and quote as per the attached specification sheet.

Contact: Supply Chain Management

For submissions:scm@mrc.ac.za

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For technical enquiries email: KfWprocurement@mrc.ac.za

REQUEST FOR PROPOSAL

PROVISION OF AN IMAGING SYSTEM FOR NUCLEIC ACID/PROTEIN GELS AND WESTERN BLOTS FOR THE CENTRE FOR BIOPROCESS ENGINEERING RESEARCH, DEPARTMENT OF CHEMICAL ENGINEERING, UNIVERSITY OF CAPE TOWN (UCT) UNDER THE DSTI/KFW/SAMRC SUPPORT OF DEVELOPMENT AND PRODUCTION OF VACCINES IN SOUTH AFRICA PROJECT

Introduction

The Government of the Republic of South African through its Department of Science, Technology and Innovation ("DSTI") has received grant funding support from the Government of the Federal Republic of Germany through its KfW Development Bank ("KfW") for the DSTI/KfW/SAMRC Support of Development and Production of Vaccines in South Africa Project. The Project provides equipment and infrastructure (including construction and Information technology) support with the purpose of strengthening vaccine research, development, pre-clinical testing, pilot-scale production and regulation in South Africa.

The South African Medical Research Council (SAMRC) is a national public entity as listed in Schedule 3A of the Public Finance Management Act, 1999 (PFMA). The SAMRC has been established through the South African Medical Research Council Act, 1991. The SAMRC's mission is "to improve the nation's health and quality of life through promoting and conducting relevant and responsive health research". The SAMRC's head office is in Cape Town (Western Cape Province) and it is also represented in Gauteng and KwaZulu-Natal Provinces through regional offices. The SAMRC has seven campuses and several satellite research sites with diverse business activities i.e. offices, biochemistry and microbiology laboratories, health research clinics, animal research centres, and tenants renting space. Further information about SAMRC can be found on the webpage, www.mrc.ac.za.

One of the conditions of the grant is that all procurement under the Project will be implemented by the SAMRC in compliance with the South African and German public sector procurement frameworks with the fundamental principles of fair, equitable, transparent, competitive, and cost-effective procurement. In this regard, Bidders should note that the equipment and infrastructure will be procured by the SAMRC on behalf of Project Beneficiaries. Equipment and infrastructure contracts will be paid for directly by SAMRC to the suppliers / service providers.

The SAMRC commenced the implementation of the Project on 1 April 2024 and subsequently issued Request for Applications inviting role-players in the vaccine production, research and

development, training and regulation industry to apply for equipment and infrastructure support under the Project. The RFA processes concluded in December 2024.

The SAMRC invites bids from suitably qualified, technically competent and experienced service providers for the **Provision of an Imaging System for Nucleic acid/protein gels and Western blots under the DSTI/KfW/SAMRC Support of Development and Production of Vaccines in South Africa Project, to be placed at the Centre for Bioprocess Engineering Research, Department of Chemical Engineering, in the University of Cape Town (UCT)** which is the Project Beneficiary.

Scope of work

Beneficiary organisation and unit

- Organisation: University of Cape Town (UCT)
- Department / unit: Centre for Bioprocess Engineering Research, Department of Chemical Engineering
- Site location (campus/building/area): Molecular laboratory (4th Floor, Chemical Engineering Building)
- Intended installation location (room / lab / area): Laboratory

Background for application of the system

Instrument/System: **Imaging system for nucleic acid/protein gels and Western blots**

Purpose and use-case

- An imaging system that allows the visualisation of stained and stain-free nucleic acid gels (e.g., DNA/RNA stained with Gel Red), protein gels (e.g., proteins stained with Coomassie blue or silver-stained), and blots (e.g., chemiluminescent) for research purposes.
- Imaging analysis will be used for quality confirmation to allow size estimation and confirmation of integrity.

Samples / materials / workload assumptions

- Sample type(s) and matrix (e.g., protein, plasmid, viral vector, cells): Nucleic acids or proteins in agarose and sodium dodecyl sulphate polyacrylamide gels and nucleic acids or proteins transferred to membranes and labelled with an appropriate antibody.
- Typical sample volume range: Not applicable
- Expected throughput (per day/week/month): 4-8 times per week
- Expected operating hours (e.g., 8/5, 24/7, occasional use): Daily use
- Users (number, skill level, training level): 3-5 users, low skill and training level required

Core functions

- The system shall have colorimetric and chemiluminescence detection modes that allow imaging of stained and stain-free nucleic acid and protein gels and chemiluminescent blots.
- The system shall allow high dynamic range imaging that yields high-quality non-saturated data for optimal quantification and resolution, optimal detection of low and high abundance targets, and the sensitive detection of visualised products.
- The system shall have a darkroom enclosure with auto-focus lens and a sample stage that allow visualisation of gels up to 18x18cm.
- The system shall have software that allows (1) automated exposure/autozoom/autofocus algorithms to allow optimal signal detection in less than 1 minute, (2) band detection, quantification, and lane profiling, (3) densitometric analysis, (4) total protein normalisation, and (5) export of the publication-ready annotated images as TIFF/JPEG.
- The system shall use LED bulbs.
- The system must preferably be a standalone unit. If PC-controlled, the computer shall be included with the imager.

Performance / capacity requirements

- Capacity (e.g., number of samples / lanes / runs / storage positions): Visualisation of gels/blots up to 18x18cm
- Performance targets (e.g., sensitivity, accuracy, precision, resolution, throughput): High resolution (≥ 9MP camera), broad dynamic range (≥ 3-4 or more orders of magnitude), and sensitivity (detect pg DNA/RNA bands and fg protein bands) as confirmed by the manufacturer.
- Environmental performance requirements (ambient range, humidity, vibration tolerance if relevant): Ambient temperature; 20-80% humidity (non-condensing)
- Uptime/availability requirement (if relevant): Not applicable

Interfaces and workflow integration

- User access needs (multi-user roles, permissions): Multiple users with role-based access control

Further Technical specifications (how it can meet the functions)

(Only specify technical parameters that are truly required; avoid design lock-in.)

System architecture / components

- Required modules/components (if genuinely required): Any modules/components required to allow the system to fulfil its core functions as outlined in *Core functions*.

- Consumables compatibility requirements (if relevant and non-brand-specific): Compatible with commercially available nucleic acid and protein stains and horseradish peroxidase (HRPO) labelled antibodies.
- Required accessories / included items: Any accessories required to allow the system to fulfil its core functions as outlined in *Core functions*.

Materials, construction, and compliance

- Materials in contact with samples (if relevant): Imaging surface must be scratch-resistant.
- Cleanability / decontamination requirements: Imaging surface shall allow easy cleaning and decontamination with F10 solution followed by deionised water.
- Noise/heat output limits (if relevant): Not applicable

Installation and facility requirements

- Power requirements (acceptable range; plug type; UPS compatibility if needed): No special requirements
- Heat rejection / ventilation needs: Not applicable
- Footprint/weight limits: Bench-top footprint (maximum 80cm x 80cm x 80xm; L x W x H)
- Any special installation requirements (anchoring, seismic, etc.): Not applicable

GMP, quality, and regulatory requirements (if applicable)

Intended compliance context

- Research only / GLP / GMP / GxP / ISO 17025 / other (specify): Research only

Documentation deliverables

- Manuals (user/service): User manual
- Validation support documents (if applicable): Certificate of conformance (CoC), installation qualification (IQ), operational qualification (OQ), and performance qualification (PQ)/instrument performance verification (IPV) at installation using verified tests, certified tools, and performance standards as recommended by the manufacturer.

Data integrity and electronic records (if applicable)

- User access control (roles, password policy, audit trail): Not applicable
- Audit trail requirements (events captured, tamper evidence, exportability): Yes
- Data export formats and long-term retention expectations: TIFF and JPEG
- Time sync / timestamp integrity (if relevant): Yes
- Backup/restore expectations: Not applicable

Qualification / validation support (only if applicable)

- IQ/OQ support required: Yes
  If yes, specify expected deliverables and responsibilities:
  For IQ, documentation, system configuration, environmental setup, connection, and calibration checks are required.
  For OQ, functional testing and imaging performance confirmation, including resolution verification, field of view and uniformity, and detector response must be confirmed based as per the manufacturer's recommendations.

The signed IQ/OQ protocols, results of all functional tests, deviation reports and corrective actions (if necessary), and calibration certificates must be provided.

Acceptance criteria summary

- List the minimum "must pass" criteria for acceptance: Pass all IQ/OQ protocols as outlined by the manufacturer to confirm that the system is fit for purpose.

IT, cybersecurity, and connectivity

- Local/offline operation possible: Yes
- Network connection required: Yes

Conditions and commercial/operational requirements

Training

- Training required (initial + refresher): Initial competency training. Training must be formally documented to certify that personnel are qualified to operate the system.
- Number of trainees: 2-4
- Training location (on-site / supplier site / hybrid): On-site
- Training materials required: Supplied by the laboratory

Delivery, installation, and schedule

- Delivery location: South Lane, Chemical Engineering Building, Upper Campus, University of Cape Town, Rondebosch, 7700
- Installation required: Yes
- Target timeline / constraints: 4-6 weeks from date of award
- Any constraints on working hours / access to site: 08:00-16:00

Warranty and maintenance

- Warranty period required: 12-24 months
- Preventive maintenance expectations: Include 5-year maintenance/service plan

- Response time requirements (e.g., remote response within X hours; on-site within Y days): Remote within 2-3 days; On-site within 7-14 days
- Availability of local support (if required): Yes
- Spares and consumables support expectations: Available for purchase to allow preventative maintenance and limit downtime

Handover package

- Handover checklist items (documentation, training sign-off, SAT sign-off, etc.): Instrument and any additional modules/components/accessories required to the specifications outlined in *Core functions*, documentation deliverables as outlined in *Documentation deliverables*, training as outlined in *Training*, completion of all relevant acceptance and verification requirements as set out by the manufacturer as outlined in *Acceptance criteria summary*, and warranty and maintenance certificates as outlined in *Warranty and maintenance*.

Submissions

Submissions must include the following:

Requirements (For eligibility assessment)

1. Valid tax clearance or PIN
2. CSD registration
3. Company registration documents
4. BBBEE status
5. COIDA certificate

Additional Requirements (Scored)

Proposal with clear outline of the equipment required for delivery addressing the required scope of work, delivery timelines and summary of relevant expertise and experience of the company, and technical team together with:

- Company Profile and Compliance documents
- CVs and qualifications of technical team
- References: Portfolio of at least 3 contactable references with a similar supply and delivery of similar equipment. Full contact details including relevant contact person, nature of service and period (start and end dates).
- Price quotation valid for 30 days.

Submissions meeting the minimum requirements for functionality will be evaluated on price and special goal points.

The closing date for submission is 13/11/2026

Table 1. Evaluation / selection guidance criteria

Criteria	Ref No.	Description	Weight (%)	Min pre-qualification percentage	Preference points system
Functionality (Total=100%)	**1**	Company Profile indicating core business in supply and delivery of the required items as per the scope of work of the bid document. • Years' experience in supply and delivery of referred items • Organogram • Location Based • Accreditations such as SANS,ISO,etc.	**25**	**70%**	
	2	Specialized experience and technical competence of the company in offering the goods/service required in this bid or similar	**25**		
	3	Ability of the company to deliver the goods/services to the various Project Beneficiary sites in relation to this equipment within the required time.	**20**		
	4	References: Portfolio of past supply and delivery of goods/services of a similar scope. Portfolio should include full contact details of at least 3 or more client references (including relevant contact person, nature of service, contract amount and/or period, commencement date, telephone number and email addresses)	**30**		
Price					80
Specific goals					20
					100

Table 2. Rating guideline for functionality criteria

No.	Criteria	Scoring Guideline (Points)
1.	Company Profile	**20-25:** Information supplied indicated excellent proof of core business and accreditation certification submitted Greater than 10 years in business
		15–19: Information supplied indicated satisfactory proof of core business and accreditation certification submitted. 6 - 8 years in business
		10–14: Information supplied indicated average proof of core business and no accreditation certification. 3- 5 years in business
		5–9: Information supplied indicated poor/limited proof of core business and no accreditation certification. Less than 3 years in business
		0–4: Insufficient or no information provided.
2.	Specialized experience and technical competence	**20-25:** Information supplied indicate excellent experience and technical competence of the company in offering the service required in this bid
		15-19: Information supplied indicate good experience and technical competence of the company in offering the service required in this bid
		10-14: Information supplied indicate satisfactory experience and technical competence of the company in offering the service required in this bid
		5–9: Information supplied indicates poor experience and technical competence of the company in offering the service required in this bid
		0-4: No information supplied. OR Information supplied indicates no experience and technical competence of the company in offering the service required in this proposal.

3.	Delivery Lead Time	**18–20:** Lead time for delivery less than 4 weeks
		14–17: Lead time for delivery 4 to 6 weeks
		10–13: Lead time for delivery 6 to 8weeks
		5–9: Lead time for delivery 8 to 10 weeks
		1-4: Lead time for delivery 10 to 12 weeks
		0: Lead time for delivery greater than 12 weeks
4.	Contactable References	**23-30:** Three or more relevant and recent references provided with full contact details.
		15-22: Two references provided with some relevance.
		14-19: One or more references with some relevance
		6-13: One references/ or incomplete details.
		0–5: No references

NB: Where the rating guideline above does not provide for the information provided by the bidder, the evaluator reserves the right to allocate closest or any score as he/she sees fit.

Pricing Schedule

Imaging System for Nucleic acid/protein gels and Western blots

Description	**QTY**	**Amount (ZAR)**
Imaging System for Nucleic acid/protein gels and Western blots	**1**	
Shipping and Delivery expenses; and import taxes (if applicable)	**1**	
Installation, commissioning and on-site training provided by a Technical Specialist, covering software and general system applications.	**1**	
Maintenance Plan for up to 5 years	**1**	
VAT (15%)		
Total Quotation Amount (Including VAT)		